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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,829	10/24/2003	Kurt Schunke	SCHUNKE-2	1489
20151	7590	01/20/2006		
HENRY M FEIEREISEN, LLC 350 FIFTH AVENUE SUITE 4714 NEW YORK, NY 10118			EXAMINER KRAUSE, JUSTIN MITCHELL	
			ART UNIT	PAPER NUMBER
			3682	

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/693,829	Applicant(s) SCHUNKE ET AL.	
	Examiner Justin Krause	Art Unit 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2005.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-14 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1,4-14 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 29 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to the amendments and remarks filed December 29, 2005.

Claims 2 and 3 were cancelled, claims 1 and 4-14 are currently pending.

Response to Amendment

Specification

2. The amendment filed December 29, 2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the use of an "evoloid" gear tooth system. The inclusion of this limitation in place of the "involute" gear tooth system as the application was originally filed inserts additional, different and further specific meaning to the limitations set forth in the application. The term involute is not synonymous with the term evoloid and introduces an entirely new invention to the application.

Applicant is required to cancel the new matter in the reply to this Office Action.

Response to Arguments

Drawings

3. The amendments to Figure 2 and new drawings 5 and 6 are accepted as formal.

Claim Rejections - 35 USC § 112

4. Applicant's arguments, see pages 9 and 10, filed December 29, 2005, with respect to rejections under 35 USC § 112 1st and 2nd paragraphs have been fully considered and are persuasive. The rejection of claims 2, 3, 8, 12 and 14 has been withdrawn.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura (USP 6,577,034) in view of Drescher (USP 4,631,453) and Leimbach (USP 5,704,460) and in further view of Meyer et al (USP 4,249,281).

Kitamura discloses an electromotive adjustment device comprising:

- A housing (1 and 2)
- A gear mechanism including a plurality of intermeshing gear wheels to define a drive train (11 and 12, see Fig 2, 4 and 6)
- A drive motor (65-70) constructed as a brushless motor including an output journal (70) in driving relationship with the gear mechanism, wherein the output

journal has a tooth portion in engagement with a helical spur gear wheel of the gear mechanism (Col 4, lines 32-39)

Kitamura does not disclose the motor being of an external rotor type, or the output journal having an evoloid gear tooth system with three teeth.

Drescher teaches a brushless motor with an external rotor design (col 2, line 35) and it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an external rotor as a suitable substitute for the internal rotor motor as stated in Kitamura, so long as both motors are a brushless type.

Leimbach teaches an electric motor (523) having an output shaft with a gear (527) having teeth of an involute profile having preferably a maximum 3 teeth (Col 7, lines 12-16). It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a 3 tooth involute gear on the output journal of the motor, the motivation would have been that fewer teeth allows for a particularly efficient system and permits fewer reduction stages (Col 7, lines 16-20).

Kitamura as modified by Drescher and Leimbach does not disclose an evoloid gear profile.

Meyer teaches the use of evoloid gears (61 and 63) to drive an output at a substantially constant speed that is low with respect to the motor. (Col 2, line 14-16)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Kitamura as modified by Drescher and Leimbach and use evoloid gear teeth instead of the involute profile as taught by

Leimbach, the motivation would have been to drive an output at a substantially constant speed that is low with respect to the motor.

7. Claims 4-8, and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Kitamura et al. (US Patent 6,577,034) in view of Drescher et al (US Patent 4,631,453).

Kitamura as modified by Drescher discloses all of the claimed subject matter as described above and, the gear mechanism connected to a 2-stage gear reduction where each stage is comprised of 2 gears arranged on parallel shafts (Kitamura, column 2, line 38 on). The output shaft (64) is hollow and passes through both sides of the housing to facilitate attachment of an outside body from either side of the device. The housing (61) has features formed into it to hold the bearings and shafts of the device as well as the motor. These features make up the carrier that retain the gears and support the motor in place. Also specified is a motor bracket to hold the output shaft of the motor (column 2, line 38).

8. Claims 9 and 10, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura et al. in view of Drescher et al. as applied to claim 1 above, and further in view of Myers (US Patent 4,844,120).

Kitamura as modified by Drescher shows the claimed matter as described above.

Kitamura as modified by Drescher does not disclose a return spring with a shaft capable of being tensioned by a manual means.

Myers shows a return spring (70) connected to a drive shaft for a damper blade that is intended to close said damper blades when an electric motor (60) is de-energized. The return spring is directly connected to the shaft that drives the damper blade and it is possible to manually turn the shaft and tension the spring if a motor were not connected.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kitamura as modified by Drescher with Myers and add a return spring with a means of manually tensioning the spring. The motivation being the condition where power is lost to the electric motor, adequate force can be applied to the flap valve to shut the valve quickly and resist the force of air flowing through the duct.

9. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

3,998,008 discloses use of evoloid gears for smooth operation

3,247,736 discloses evoloid gearing


11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Krause whose telephone number is 571-272-3012. The examiner can normally be reached on Monday - Friday, 7:30-5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


RICHARD W. RIDLEY
PRIMARY EXAMINER
SPE AK 3682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMK

1/11/06


RICHARD W. RIDLEY
PRIMARY EXAMINER
SEE AL 3682